(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 24 December 2003 (24.12.2003)

PCT

(10) International Publication Number WO 03/106802 A1

- (51) International Patent Classification7:
- E06B 9/24
- (21) International Application Number: PCT/DK03/00405
- (22) International Filing Date: 18 June 2003 (18.06.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: PA 2002 00929

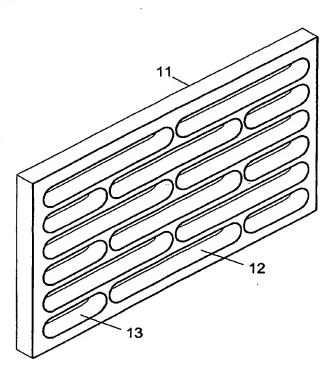
18 June 2002 (18.06.2002)

- (71) Applicant (for all designated States except US): TEK-NOLOGISK INSTITUT [DK/DK]; Gregersensvej, DK-2630 Taastrup (DK).
- (72) Inventors; and
- Inventors/Applicants (for US only): BEZZEL, Eik [DK/DK]; Møllebjergvej 16, DK-4330 Hvalsø (DK). LAURITZEN, Hanne [DK/DK]; Stenstræde 3, DK-2620 Albertslund (DK). WEDEL, Signe [DK/DK]; Marskensgade 13, DK-2100 Conpenhagen Ø (DK).

- Agent: ZACCO DENMARK A/S; Hans Bekkevolds Allé 7, DK-2900 Hellerup (DK).
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL. IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: AN OPTICAL ELEMENT FOR SHIELDING AGAINST LIGHT



(57) Abstract: An optical element (11) in the form of an at least partially transparent face comprises transparent areas and essentially non-transparent The transparent areas are arranged sufficiently close for the intermediate and essentially non-transparent areas to be essentially invisible to the naked eye, at least when the element is viewed from a given distance. The essentially non-transparent areas are arranged sufficiently close and have a sufficient extent at right angles to the face for the intermediate, transparent areas to have such depth/width ratio that the optical element will, at a given point on the face, allow passage of light with given angles of incidence, while light having other angles of incidence are unable to pass the element at the point in question. Hereby an optical element is obtained that is able to better reduce the heating of the interior of a building that is caused by incoming solar radiation without the direct radiation and hence the view being blocked considerably.

WO 03/106802 A1